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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/652,395	08/29/2003	Tetsuya Ishida	10973-103001	3577
26211	7590	12/06/2005	EXAMINER	
FISH & RICHARDSON P.C. P.O. BOX 1022 MINNEAPOLIS, MN 55440-1022			NEGRON, ISMAEL	
			ART UNIT	PAPER NUMBER
			2875	

DATE MAILED: 12/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

AK

<b>Office Action Summary</b>	<b>Application No.</b> 10/652,395	<b>Applicant(s)</b> ISHIDA, TETSUYA	
	<b>Examiner</b> Ismael Negron	<b>Art Unit</b> 2875	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 30 September 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 August 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Response to Amendment*

1. Applicant's amendment filed on September 30, 2005 has been entered. Claims 7-9 have been amended. No claim has been cancelled. Claim 10 has been added. Claims 1-10 are still pending in this application, with Claim 1 being independent.

### *Drawings*

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character “**304**” has been used to designate both “*light source*” (page 11, line 20) and “*electric discharge bulb*” (page 12, line 5). The applicant is advised that the reference characters must be properly applied, with no single reference character being used for two different parts or for a given part and a modification of such part. See MPEP §608.01(g).

In this case, as admitted by the applicant “*electric discharge bulb*” is merely one specific example of all the elements described by the phrase “*light source*”, and as such presents a modification of the general group of “*light sources*”.

3. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement-drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin

as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-4 and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by SHIBATA et al. (U.S. Pat. 4,908,560).
5. SHIBATA et al. discloses a vehicle lamp system having:
  - **a light distribution control (LDC) means (as recited in Claim 1),**  
Figure 2, reference number 5;
  - **the LDC means being for controlling the direction or range of**  
**light emitted by a light source (as recited in Claim 1),** column 3,  
lines 54-65;
  - **a rotation drive means (as recited in Claim 1),** Figure 1,  
reference number 4;

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- **the rotation drive means having a drive motor (as recited in Claim 1), Figure 1, reference number 46;**
- **the motor driving the LDC means (as recited in Claim 1), column 3, lines 59-65;**
- **rotation range detection (RRD) means (as recited in Claim 1), Figure 1, reference number 47;**
- **the RRD means being for detecting a rotation range of the drive motor (as recited in Claim 1), column 3, lines 35-40;**
- **abnormality judgment (AJ) means (as recited in Claim 1), Figure 1, reference number 41;**
- **the AJ means being for judging an abnormality of the rotation drive means (as recited in Claim 1), column 3, lines 41-50;**
- **the judging being according to a rotation range of the drive motor detected by the rotation range detection means when the rotation drive means is driven in a predetermined condition (as recited in Claim 1), column 3, lines 41-53;**
- **a first rotation range being obtained when the drive motor is rotated in one direction and then rotated in the opposite direction (as recited in Claim 2), inherent;**
- **the AJ means judges an abnormality under a predetermined condition by comparing the first rotation range with a**

**predetermined rotation range (as recited in Claim 2), column 3, lines 54-65;**

- **a pair of rotation ranges being obtained when the drive motor is rotated in one direction and the other rotation range being obtained when the drive motor is rotated in the opposite direction (as recited in Claim 3), inherent;**
- **the AJ means judges an abnormality under a predetermined condition by comparing one of the pair of rotation ranges with a previously set predetermined rotation range (as recited in Claim 3), column 3, lines 54-65;**
- **when one of the pair of the rotation range is larger than the predetermined rotation range the rotation is judged to be abnormal (as recited in Claim 3), inherent;**
- **the AJ means repeats a judgment motion when it has judged an abnormality (as recited in Claim 4), as evidenced by column 7, lines 14-33; and**
- **the abnormality judgment means judging if a malfunction of the rotation drive means has occurred (as recited in Claim 10), column 3, lines 41-50.**

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over SHIBATA et al. (U.S. Pat. 4,908,560).
7. SHIBATA et al. discloses a vehicle lamp system having:
  - **a light distribution control (LDC) means (as recited in Claim 1),**  
Figure 2, reference number 5;
  - **the LDC means being for controlling the direction or range of light emitted by a light source (as recited in Claim 1),** column 3, lines 54-65;
  - **a rotation drive means (as recited in Claim 1),** Figure 1, reference number 4;
  - **the rotation drive means having a drive motor (as recited in Claim 1),** Figure 1, reference number 46;
  - **the motor driving the LDC means (as recited in Claim 1),** column 3, lines 59-65;
  - **rotation range detection (RRD) means (as recited in Claim 1),** Figure 1, reference number 47;

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- **the RRD means being for detecting a rotation range of the drive motor (as recited in Claim 1), column 3, lines 35-40;**
- **abnormality judgment (AJ) means (as recited in Claim 1), Figure 1, reference number 41;**
- **the AJ means being for judging an abnormality of the rotation drive means (as recited in Claim 1), column 3, lines 41-50;**
- **the judging being according to a rotation range of the drive motor detected by the rotation range detection means when the rotation drive means is driven in a predetermined condition (as recited in Claim 1), column 3, lines 41-53;**
- **the rotation range detection means including a sensing element (as recited in Claim 5), Figure 1, reference number 47;**
- **a second sensing element, Figure 1, reference number 2;**
- **the second sensing element sensing rotation of a steering wheel, column 2, lines 36-39;**
- **the second sensing element outputting pulse signals in response to the rotation of the drive motor (as recited in Claim 5), column 2, lines 5-57;**
- **an up-down counter (as recited in Claim 5), Figure 1, reference number 32;**
- **the counter counting the number of pulses (as recited in Claim 5), inherent; and**



- **a first rotation range being obtained from a first counting number of the up-down counter when the steering wheel is rotated in one direction and a second counting number of the up-down counter when rotated in the opposite direction (as recited in Claim 6), inherent.**

8. SHIBATA et al. discloses all the limitations of the claims, except:

- the sensing element outputting pulse signals in response to the rotation of the drive motor (as recited in Claim 5);
- the AJ means judges an abnormality by comparing a first rotation range with a predetermined rotation range (as recited in Claim 6);
- when a condition is judge as abnormal, the control means causes the head lamp to be deflected and fixed at a maximum deflection angle (as recited in Claim 7);
- when a condition is judged as abnormal, the control means causes the head lamp to be directed forward (as recited in Claim 8).; and
- when a condition is judged as abnormal, the control means causes the headlamp to emit light at a low luminance (as recited in Claim 9).

9. It would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to substitute the motor rotation sensor of SHIBATA et al.

with a pulsed output sensor, like the steering wheel rotation sensor, to increase the precision of the motor position detection means, as per the teachings of SHIBATA et al..

10. Regarding the headlamp being positioned at a maximum deflection angle (as recited in Claim 7), being directed forward (as recited in Claim 8) or the head lamp emitting light at a low luminance (as recited in Claim 9) when an abnormal condition is detected, it would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to position the headlamp as claimed when an abnormal condition is detected, since selecting a specific position for the headlamp in the event of an abnormal condition would amount to a recitation of the intended use of the patented invention, without resulting in any structural difference between the claimed invention and the structure disclosed by SHIBATA et al., and therefore fails to patentably distinguish the claimed invention from the prior art. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963). In this case, once the patented structure of SHIBATA et al. is known selecting the action to be taken in response to the detection of an abnormal condition would have flown naturally to one of ordinary skill in the art motivated by the particular requirements of a specific application, or desired effect.

### ***Response to Arguments***

11. Applicant's arguments filed September 30, 2005 have been fully considered but they are not persuasive.

12. Regarding the Examiner's rejection of Claim 1 under 35 U.S.C. 102(b) as being anticipated by SHIBATA et al. (U.S. Pat. 4,908,560), the applicant argues that the cited reference fails to disclose all the features of the claimed invention, specifically the judgment detections means detecting an abnormality when the components function improperly (e.g. motor or gear malfunction, or when the lamp means exceed a predetermined threshold).

13. In response to applicant's arguments that SHIBATA et al. failed to disclose individually means for detecting a headlamp apparatus components malfunction, the applicant is respectfully advised that while the claims of issued patents are interpreted in light of the specification, prosecution history, prior art and other claims, this is not the mode of claim interpretation to be applied during examination. During examination, the claims must be interpreted as broadly as their terms reasonably allow. *In re American Academy of Science Tech Center*, 70 USPQ2d 1827 (Fed. Cir. May 13, 2004). In this case, SHIBATA et al. discloses a vehicle headlamp apparatus having means for adjusting the angle of the headlamp in response to the rotation angle of the steering wheel, including means for detecting when the rotation angle exceeds the target angle and compensating for such deviation from the target angle, as admitted by the applicant. The abnormality detected by the detection system of SHIBATA et al. (e.g. target rotation angle deviation) was considered to broadly meet the claimed abnormality judgment means as defined by the claims.

14. Regarding the Examiner's rejection of claims 2-4 under 35 U.S.C. 102(b) as being anticipated by SHIBATA et al. (U.S. Pat. 4,908,560), the applicant present no arguments, except stating that such claims depend directly from independent Claim 1 and would be allowable when/if the independent claim is allowed.

15. Regarding the Examiner's rejection of Claim 5 under 35 U.S.C. 103(a) as being unpatentable over SHIBATA et al. (U.S. Pat. 4,908,560), the applicant argues that the cited reference fails to disclose all the features of the claimed invention, specifically a pulsed output sensor. The applicant further argues that the Examiner admitted that the cited reference failed to show the claimed sensor.

16. In response to applicant's surprising arguments that SHIBATA et al. failed to disclose a pulsed output sensor, the applicant is respectfully directed to Figure 1 where a pulsed output sensor 2 is shown for detecting rotation of the vehicle steering wheel (also see column 2, lines 51-54). Using a pulsed output sensor, such as the one used by SHIBATA et al. to sense rotation of the steering wheel, to detect the rotation of the motor would have flown naturally to one of ordinary skill in the art to increase the precision of the sensing structure. It is also noted that the use of pulsed output sensors for providing position feedback in servo motors is all and well known in the art, as evidenced by the Prior Art made of record in Section 13 of the prior Office Action (Paper No. 20050624).

17. Regarding the Examiner's rejection of Claim 5 under 35 U.S.C. 103(a) as being unpatentable over SHIBATA et al. (U.S. Pat. 4,908,560), the applicant argues that the

cited reference fails to disclose all the features of the claimed invention, specifically a pulsed output sensor. The applicant further argues that the Examiner admitted that the cited reference failed to show the claimed sensor.

18. Regarding the Examiner's rejection of Claim 6 under 35 U.S.C. 103(a) as being unpatentable over SHIBATA et al. (U.S. Pat. 4,908,560), the applicant presents no arguments.

19. Regarding the Examiner's rejection of claims 7-9 under 35 U.S.C. 103(a) as being unpatentable over SHIBATA et al. (U.S. Pat. 4,908,560), the applicant argues that the cited reference fails to disclose all the features of the claimed invention, specifically the rotation drive means causing the head lamp to be deflected and fixed at a maximum angle (as recited in Claim 7), or to be directed forward (as recited in Claim 8) or to emit light at a low luminance (as recited in Claim 9).

### ***Conclusion***

20. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

21. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

22. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ismael Negron whose telephone number is (571) 272-2376. The examiner can normally be reached on Monday-Friday from 9:00 A.M. to 6:00 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra L. O'Shea, can be reached at (571) 272-2378. The facsimile machine number for the Art Group is (571) 273-8300.

23. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications maybe obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, go to <http://pair-direct.uspto.gov>. Should you

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have questions on access to Private PAIR system, contact the Electronic Business Center (EBC) toll-free at 866-217-9197.

  
Ismael Negron  
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**THOMAS M. SEMBER**  
**PRIMARY EXAMINER**